



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/693,109	10/24/2003	Kenn Christensen	42P17146	1625

59796 7590 08/14/2006

INTEL CORPORATION
c/o INTELLEVATE, LLC
P.O. BOX 52050
MINNEAPOLIS, MN 55402

EXAMINER

NGUYEN, PATRICIA T

ART UNIT	PAPER NUMBER
----------	--------------

2817

DATE MAILED: 08/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/693,109

Applicant(s)

CHRISTENSEN, KENN

Examiner

Patricia T. Nguyen

Art Unit

2817

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,4,7-19 and 21 is/are rejected.
- 7) ☒ Claim(s) 2,5,6,20,22 and 23 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>4/12/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3, 4, and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Park et al., U.S. Patent # 5,821,812.

Fig. 2 of Park et al. discloses a circuit comprising: a first amplifier (differential amplifier having transistors 5, 9) comprising first input terminals (4, 8) and first output terminals (nodes 1, 12), wherein the first amplifier is to amplify an input signal (Vin1, Vin2) provided to the first input terminals and to provide the amplified input signal to the first output terminals; a second amplifier (differential amplifier having transistors 31, 34) comprising second input terminals (nodes 24, 27) and second output terminals (nodes 30, 35), wherein the second input terminals are operatively responsive to a second input signal and wherein the second amplifier is to amplify the second input signal and provide the amplified second input signal to the second output terminals; and a coupling device (emitter follower transistors 23, 28) to provide operative responsiveness by the second input terminals to the first output terminals, wherein a common mode voltage at the first output terminals and the second input terminals are approximately equal.

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1, 3, 4, and 7 are rejected under 35 U.S.C. 102(a) as being anticipated by EP 1246367 A2.

Fig. 2 of EP 1246367 A2 discloses a circuit comprising: a first amplifier (differential amplifier having transistors 603, 604) comprising first input terminals (nodes 601, 602) and first output terminals (nodes at collectors of 603, 604), wherein the first amplifier is to amplify an input signal (at nodes 601, 602) provided to the first input terminals and to provide the amplified input signal to the first output terminals; a second amplifier (differential amplifier having transistors 623, 624) comprising second input terminals (nodes at gates of 623, 624) and second output terminals (nodes 628, 629), wherein the second input terminals are operatively responsive to a second input signal and wherein the second amplifier is to amplify the second input signal and provide the amplified second input signal to the second output terminals; and a coupling device (emitter follower transistors 612, 613, 618, 619, interconnects 638, 639) to provide operative responsiveness by the second input terminals to the first output terminals, wherein a common mode voltage at the first output terminals and the second input terminals are approximately equal.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 8-19 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Park et al., U.S. Patent # 5,821,812 in view of EP 1265149 A2.

Regarding claim 8, although Park et al. does not have a retimer and a bus in his circuit, EP 1265149 A2 teaches the use of a retimer and a bus in the circuit of Fig.1; therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to use the teaching of EP 1265149 A2 in the circuit of Park et al. in order to have a practical use for the circuit to meet system requirements since this is a design choice and a retimer and a bus in a circuit is a well known bus architecture in the art.

Regarding claim 21, although Park et al. does not mention that a supply voltage to the first amplifier, second amplifier, and coupling device is approximately 1.8 volts, this is just a design variable and thus, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to use 1.8 volts for the supply voltage in order to have an optimum working condition for the circuit since this is a matter of design choice.

Claims 8-19 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 1246367 A2 in view of EP 1265149 A2.

Regarding claim 8, although EP 1246367 A2 does not have a retimer and a bus in his circuit, EP 1265149 A2 teaches the use of a retimer and a bus in the circuit of Fig.1; therefore, it would have been obvious at the time the invention was made to a

Art Unit: 2817

person having ordinary skill in the art to use the teaching of EP 1265149 A2 in the circuit of EP 1246367 A2 in order to have a practical use for the circuit to meet system requirements since this is a design choice and a retimer and a bus in a circuit is a well known bus architecture in the art.

Regarding claim 21, although EP 1246367 A2 does not mention that a supply voltage to the first amplifier, second amplifier, and coupling device is approximately 1.8 volts, this is just a design variable and thus, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to use 1.8 volts for the supply voltage in order to have an optimum working condition for the circuit since this is a matter of design choice.

Allowable Subject Matter

Claims 2, 5, 6, 20, 22, and 23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patricia T. Nguyen whose telephone number is (571) 272-1768. The examiner can normally be reached on 6:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pascal can be reached on 571-272-1769. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

PTN
August 2, 2006



PATRICIA NGUYEN
PRIMARY EXAMINER